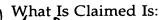
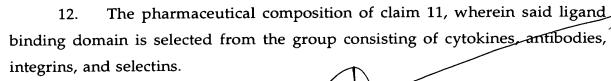
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of a patient comprising administering to said patient heparinase enzyme in an effective amount sufficient to decrease said localized inflammatory response.

- 2. The method of claim 1, wherein said administration of said heparinase enzyme removes and digests heparin and heparan sulfate from endothelial cell surfaces and extracellular matrices of said tissue.
- 3. The method of claim 1, wherein said administration of said heparinase enzyme decreases the accumulation of leukocytes in tissue adjacent to endothelial cell surfaces and extracellular matrices.
- 4. The method of claim 1, wherein said administration of said heparinase enzyme inhibits leukocyte extravasation by releasing immobilized chemokines and destroying chemokines immobilized to endothelium.
- 5. The method of claim 1, wherein said administration of said heparinase enzyme inhibits leukocyte rolling on endothelium.
- 6. The method of claim 1, wherein said heparinase enzyme is lowerexpressed from a recombinant nucleotide sequence, in *Flavobacterium* heparinum.
 - 7. The method of claim 1, wherein said heparinase enzyme is expressed from a recombinant nucleotide sequence in an organism in which it does not naturally occur.
- 8. A method to decrease a localized inflammatory response in a tissue of a patient comprising administering to said patient a fusion protein comprising a ligand which binds to activated endothelial cells and a heparinase enzyme in an amount sufficient to decrease said localized inflammatory response in said tissue.
- 9. The method of claim 8, wherein said fusion protein is made by genetic engineering techniques.
 - 10. A pharmaceutical composition comprising a heparinase enzyme together with a pharmaceutically or a veterinarilly acceptable carrier.
 - 11. A pharmaceutical composition comprising <u>fusion molecule</u> comprising a ligand which binds to activated endothelium and a heparinase enzyme.



- 13. The pharmaceutical composition of claim 11, wherein said ligand binding domain are fragments of said cytokines, antibodies, integrins, and selectins.
- 14. The pharmaceutical composition of claim 11, wherein said fragments are selected from the group consisting of cytokine receptor binding domains, Fab fragments, antibody variable regions, integrin I-domains, and selectin domains.
 - said carrier is selected from the group consisting of liposomes, lipospheres, proteosomes, microspheres, microcapsules, and biodegradable polymeric matrices.
 - 16. The use of a heparinase enzyme in the preparation of a medicant for treatment of decreasing localized inflammatory responses in a patient's tissue.
- 17. The use of a heparinase enzyme in the preparation of a medicant comprising a fusion protein comprising a ligand which binds to activated endothelial cells and a heparinase enzyme for the treatment of decreasing localized inflammatory responses in a patient's tissue.

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